

Claims

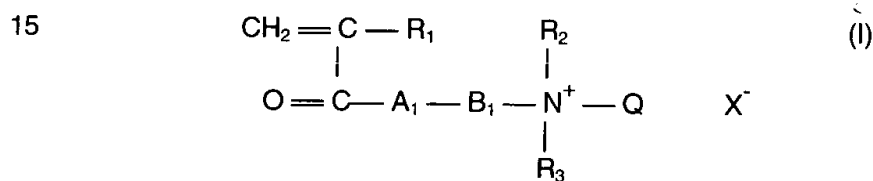
1. A process for manufacturing paper and board comprising providing a suspension comprising cellulosic fibres and at least a sizing agent, dewatering said suspension thereby forming a paper-web, wherein
- 5 i) an aromatic-containing cationic vinyl addition polymer is added to the suspension in an amount of from about 0.005 % by weight up to about 1.0 % by weight based on dry pulp, and
- ii) an anionic polymer having a weight average molecular weight of up to about 500,000 selected from the group consisting of vinyl addition polymers and condensation polymers is
- 10 added to the suspension in an amount of from about 0.001 % by weight up to about 3.0 % by weight based on dry pulp,
- whereby the aromatic-containing cationic vinyl addition polymer and the anionic polymer are added separately to the suspension.
- 15 2. A process according to claim 1, wherein the anionic polymer has a weight average molecular weight in the range from about 10,000 up to about 100,000.
3. A process according to claim 2, wherein the weight average molecular weight is in the range from about 15,000 up to about 75,000.
- 20 4. A process according to claim 1, wherein the anionic polymer comprises aromatic monomers having sulphonate groups.
5. A process according to claim 1, wherein the anionic polymer is a vinyl addition
- 25 polymer having a weight average molecular weight of up to about 500,000.
6. A process according to claim 5, wherein the anionic vinyl addition polymer comprises aromatic monomers.
- 30 7. A process according to claim 6, wherein the aromatic monomers have at least one sulphonate group.

8. A process according to claim 5, wherein the anionic vinyl addition polymer is polystyrene sulphonate.

5 9. A process according to claim 1, wherein the aromatic-containing cationic vinyl addition polymer has a weight average molecular weight of at least about 500,000.

10 10. A process according to claim 1, wherein the cationic vinyl addition polymer is prepared from a reaction mixture comprising from about 1 up to 99 mole% of a cationic monomer having an aromatic group.

11. A process according to claim 11, wherein the cationic monomer having an aromatic group is represented by formula (I)



wherein R_1 is H or CH_3 ; R_2 and R_3 are independently from another a hydrogen or an alkyl group having from 1 to 3 carbon atoms; A_1 is O or NH; B_1 is an alkylene group having from 2 to 8 carbon atoms; Q is a substituent containing an aromatic group; and X^- is an anionic counterion.

25